SEQUENCE LISTING

<110> Holoshitz, Joseph
Ling, Song

<120> Methods and Compositions for the Treatment of Diseases Associated with Signal Transduction Aberrations

<130> UM-08550

<140> 10/786,774
<141> 2005-02-25

<160> 36

<170> PatentIn version 3.2

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<220>
<223> Synthetic

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Gln Lys Arg Ala Ala
1 5

<210> 2
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<220>
<223> Synthetic

<400> 2

Gln Arg Arg Ala Ala
1 5

<210> 3
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<223> The residue at this position can be lysine or arginine.

<220>
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<223> The residues at these positions can be any amino acid.

<400> 3

Gln Xaa Xaa Xaa Ala
1 5

<210> 4
<211> 5
<212> PRT
<213> Escherichia coli

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<223> The residues at these positions can be any amino acid.

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Gln His Xaa Xaa Ala
1 5

<210> 5
<211> 15
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<223> Synthetic

<400> 5

Lys Asp Leu Leu Glu Gln Lys Arg Ala Ala Val Asp Thr Tyr Cys
1 5 10 15

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Lys Asp Leu Leu Glu Gln Lys Arg Ala Ala Val Asp Thr Tyr
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<220>
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<400> 7

Lys Asp Ile Leu Glu Asp Glu Arg Ala Ala Val Asp Thr Tyr Cys
1 5 10 15

<210> 8
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<223> Synthetic

<400> 8

Lys Asp Ile Leu Glu Asp Glu Arg Ala Ala Val Asp Thr Tyr
1 5 10

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<212> PRT
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<220>
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<400> 9

Lys Asp Leu Leu Glu Gln Arg Arg Ala Glu Val Asp Thr Tyr Cys
1 5 10 15

<210> 10
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 10

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1 5 10 15

<210> 11
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<220>
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<400> 11

Gln Lys Arg Leu Ala
1 5

<210> 12
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<400> 12

Gln Lys Cys Leu Ala
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<210> 13
<211> 5
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<400> 14

Gln Lys Arg Ala Glu
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<400> 15

Gln Glu Cys Leu Ala
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<210> 16
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<220>
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<400> 16

Asp Lys Cys Leu Ala
1 5

<210> 17
<211> 169
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<400> 17

Met Asp Ile Asp Pro Tyr Lys Glu Phe Gly Ala Thr Val Glu Leu Leu
1 5 10 15

Ser Phe Leu Pro Ser Asp Phe Phe Pro Ser Val Arg Asp Leu Leu Asp
20 25 30

Asn Ala Ser Ala Leu Tyr Arg Glu Ala Leu Glu Ser Pro Glu His Cys
35 40 45

Ser Pro His His Thr Ala Leu Arg Gln Ala Ile Leu Cys Trp Gly Glu
50 55 60

Leu Met Thr Leu Ala Thr Trp Val Gly Gly Asn Leu Glu Asp His Lys
65 70 75 80

Asp Leu Leu Glu Gln Lys Arg Ala Ala Val Asp Thr Tyr Cys Val Asp
85 90 95

Pro Ile Ser Arg Asp Leu Val Val Ser Tyr Val Asn Thr Asn Met Gly
100 105 110

Leu Lys Phe Arg Gln Leu Leu Trp Phe His Ile Ser Cys Leu Thr Phe
115 120 125

Gly Arg Glu Thr Val Ile Glu Tyr Leu Val Ser Phe Gly Val Trp Ile
130 135 140

Arg Thr Pro Pro Ala Tyr Arg Pro Pro Asn Ala Pro Ile Leu Ser Thr
145 150 155 160

Leu Pro Ala Trp Ala Arg Val Ile Asn
165

<210> 18
<211> 169
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 18

Met Asp Ile Asp Pro Tyr Lys Glu Phe Gly Ala Thr Val Glu Leu Leu
1 5 10 15

Ser Phe Leu Pro Ser Asp Phe Phe Pro Ser Val Arg Asp Leu Leu Asp
20 25 30

Asn Ala Ser Ala Leu Tyr Arg Glu Ala Leu Glu Ser Pro Glu His Cys
35 40 45

Ser Pro His His Thr Ala Leu Arg Gln Ala Ile Leu Cys Trp Gly Glu
50 55 60

Leu Met Thr Leu Ala Thr Trp Val Gly Gly Asn Leu Glu Asp His Lys
65 70 75 80

Asp Ile Leu Glu Asp Glu Arg Ala Ala Val Asp Thr Tyr Cys Val Asp
85 90 95

Pro Ile Ser Arg Asp Leu Val Val Ser Tyr Val Asn Thr Asn Met Gly
100 105 110

Leu Lys Phe Arg Gln Leu Leu Trp Phe His Ile Ser Cys Leu Thr Phe
115 120 125

Gly Arg Glu Thr Val Ile Glu Tyr Leu Val Ser Phe Gly Val Trp Ile
130 135 140

Arg Thr Pro Pro Ala Tyr Arg Pro Pro Asn Ala Pro Ile Leu Ser Thr
145 150 155 160

Leu Pro Ala Trp Ala Arg Val Ile Asn
165

<210> 19
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<223> Synthetic

<400> 19
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<210> 20
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 20
cacaaggaca tcctggaaga cgagcgggcc gcggtggaca cctactgcgt agat 54

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<212> PRT
<213> Artificial Sequence

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<220>
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<223> The amino acid at this position can be lysine, arginine, or histidine.

<220>
<221> MISC_FEATURE
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<223> The amino acids at these positions can be any amino acid.

<400> 21

Gln Xaa Xaa Xaa Ala
1 5

<210> 22
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 22

Gln Arg Ala Cys Ala
1 5

<210> 23
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 23

Gln Lys Arg Ala Ala Cys
1 5

<210> 24
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 24

Cys Gln Lys Arg Ala Ala
1 5

<210> 25
<211> 5
<212> PRT
<213> Escherichia coli

<220>
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<223> The amino acid at this position is selected from the group of amino acids consisting of alanine, valine, leucine, isoleucine, serine, threonine and asparagine.

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> The amino acid at this position is selected from the group of amino acids consisting

of alanine, valine, isoleucine, serine, threonine and asparagine.

<400> 25

Gln Arg Xaa Xaa Ala
1 5

<210> 26
<211> 5
<212> PRT
<213> Escherichia coli

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<220>
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<222> (4)..(4)
<223> The amino acid at this position is selected from the group of amino acids consisting of

alanine, valine, isoleucine, serine, threonine and asparagine.

<400> 26

Gln Lys Xaa Xaa Ala
1 5

<210> 27
<211> 5
<212> PRT
<213> Escherichia coli

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<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> The amino acid at this position is 2 is selected from the group of amino acids consisting of alanine, valine, isoleucine, serine, threonine and asparagine.

<400> 27

Gln His Xaa Xaa Ala
1 5

<210> 28
<211> 14
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<220>
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<400> 28

Lys Asp Leu Leu Glu Gln Arg Arg Ala Ala Val Asp Thr Tyr
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<213> Artificial Sequence

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<223> Synthetic

<400> 29

Met Leu Leu Ser Val Pro Leu Leu Leu Gly Leu Leu Gly Leu Ala Val
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Ala Glu Pro Ala Val Tyr Phe Lys Glu Gln Phe Leu Asp Gly Asp Gly
20 25 30

Trp Thr Ser Arg Trp Ile Glu Ser Lys His Lys Ser Asp Phe Gly Lys
35 40 45

Phe Val Leu Ser Ser Gly Lys Phe Tyr Gly Asp Glu Glu Lys Asp Lys
50 55 60

Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65 70 75 80

Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
85 90 95

Val Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu
100 105 110

Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
115 120 125

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Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
    130                 135                 140

His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
145                 150                 155                 160

Ile Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val
                165                 170                 175

Arg Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu
            180                 185                 190

Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
        195                 200                 205

Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
    210                 215                 220

Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
225                 230                 235                 240

His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
                245                 250                 255

Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
            260                 265                 270

Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
        275                 280                 285

Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
    290                 295                 300

Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
305                 310                 315                 320

Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
                325                 330                 335

Ala Tyr Ala Glu Glu Phe Gly Asn Glu Thr Trp Gly Val Thr Lys Ala
            340                 345                 350

Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys
        355                 360                 365

Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu Asp
    370                 375                 380
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Lys Glu Asp Asp Glu Asp Lys Asp Glu Asp Glu Glu Asp Glu Glu Asp
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Lys Glu Glu Asp Glu Glu Glu Asp Val Pro Gly Gln Ala Lys Asp Glu
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Leu

<210> 30
<211> 7
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<213> Escherichia coli

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<220>
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<223> The residue at this position can be any amino acid.

<400> 30

Xaa Gln Arg Arg Ala Glu Xaa
1 5

<210> 31
<211> 7
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<223> The residue at this position can be any amino acid.

<400> 31

Xaa Gln Arg Arg Ala Ala Xaa
1 5

<210> 32
<211> 7
<212> PRT
<213> Escherichia coli

<220>
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<222> (1)..(1)
<223> The residue at this position can be any amino acid.

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<400> 32

Xaa Gln Arg Arg Thr Ala Xaa
1 5

<210> 33
<211> 7
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<400> 33

Xaa Gln Lys Arg Leu Ala Xaa
1 5

<210> 34
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<400> 34

Xaa Gln Lys Cys Leu Ala Xaa
1 5

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<210> 36
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<213> Escherichia coli

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<223> The residue at this position can be any amino acid.

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<223> The residue at this position can be any amino acid.

<400> 36

Xaa Asp Glu Arg Ala Ala Xaa
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